

# Healdsburg

Commitments to meeting  
community greenhouse  
gas reduction goals.





## 5.3 Healdsburg

This section presents the community greenhouse gas (GHG) emissions profile specific to Healdsburg and the measures that the City of Healdsburg will implement, with the support of the RCPA and other regional entities, as part of the regional approach to reducing GHG emissions.

### 5.3.1 Community Summary

Healdsburg is a historic, small town centered on a 19<sup>th</sup>-century plaza. Located approximately 22 miles inland and 12 miles north of Santa Rosa, Healdsburg is situated among three important wine-producing regions: Russian River, Dry Creek, and Alexander Valley American Viticultural Areas. Composed of small and globally-recognized businesses, renowned restaurants, local hotels and bed and breakfasts, as well as outdoor recreation; Healdsburg welcomes guests year-round to enjoy small town charm, beautiful natural scenery, and wine country hospitality. Healdsburg has been recognized as one of the top 10 smallest towns in America and was most recently recognized as one of the best towns for the holidays.

Healdsburg, its residents, and community are dedicated to preserving the City's rich history and ensure a healthy future for generations to come. In order to achieve these goals, the City of Healdsburg adopted a 5-year strategic plan called "Pathway to Sustainability." The first strategic initiative of this plan, Quality of Life, identifies Promoting Environmental Sustainability as one of its priorities.

Unique to Healdsburg as a member of the Sonoma County CAP is the City's electric utility. Since 1899, the City of Healdsburg has owned and operated its own Electric Utility. Over the last 100 plus years, the City has moved from a small hydro generation plant in the Black Mountains to owning generation plants throughout northern California, maintaining over 60 miles of high voltage distribution lines with safety and reliability ratings well exceeding statewide averages.

Through the City's ownership of geothermal power plants at the Geysers and hydro-electric plants in Calaveras County, the City provides a high level of renewable and carbon-free energy to its customers. The City regularly surpasses the state's Renewable Portfolio Standard (RPS) requirements (20% by December 31, 2013; 25% by December 31, 2016; and 33% by 2020) and is well positioned to meet new RPS requirements proposed in SB 350 (50% by 2030). In most years, the City's electricity ranges from 50 to 60% carbon free, with over 43% of that energy coming from renewable energy provided by the Geysers. In addition, the City offers a Green Electric Rate, which allows customers to use 100% renewable energy. The City of Healdsburg's commitment to highly renewable and carbon-free sources of power reflect the importance of, and our community's commitment to, environmental stewardship and climate change mitigation.

### Demographics

The City of Healdsburg spans 4.5 square miles and had a population of 11,254 as of the 2010 census. In 2020 the population of Healdsburg is expected to be 11,315, an increase of 1% over

2010. Employment in the area is expected to increase by 1%. Healdsburg's demographic composition in 2010 was 74% White, 0.5% African American, 2% Native American, 1% Asian, 0.2% Pacific Islander, 19% from other races, and 3% from two or more races. Persons of Hispanic or Latino origin were 34%.

As shown in Table 5.3-1, growth in population, housing, and jobs in the City is expected to occur slowly.

**Table 5.3-1. Healdsburg Socioeconomic Data**

	Actual		Projected			
	1990	2010	2015	2020	2040	2050
Population	9,469	11,254	11,285	11,402	11,799	12,002
Housing	3,613	4,471	4,483	4,530	4,687	4,768
Employment	6,926	7,351	7,399	7,447	7,447	7,447

Socioeconomic data were derived from the SCTA travel demand model and incorporate input from the City based on its internal planning forecasts.

According to the 2010 Census, most housing in Healdsburg is owner-occupied (58%) with the remaining 42% renter-occupied.

## Energy and Water Use

Compared to households in the county as a whole, Healdsburg households use less electricity but more natural gas and water. They also use less electricity, natural gas, and water than households statewide.

**Table 5.3-2. Healdsburg, County, and State 2010 Average Energy and Water Use (per household, per year)**

	Healdsburg	County	State
Electricity (kWh)	6,331	7,042	9,320
Natural Gas (Therms)	500	413	512
Water Use (Gallons)	90,362	75,810	107,869

Sources:

City Data: provided by the City of Healdsburg (electricity & water) and by PG&E (electricity & natural gas).

County Data: provided by PG&E (energy) and the cities or their Urban Water Management Plans (water).

State Data: U.S. Energy Information Administration 2009, U.S. Geological Survey 2014, California Department of Finance 2015.

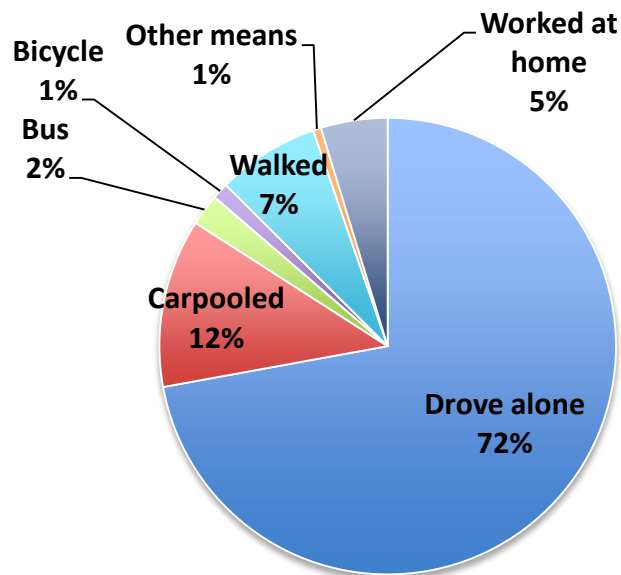
kWh = kilowatt hours

## Transportation Commute Modes

In the inventory year 2010, Healdsburg had the highest rate in the county of residents walking to work, yet overall most residents drive alone to work. The City is working to increase alternative

options with the transportation measures adopted through this plan. According to 2010 Census data, the average trip to work takes about 20.6 minutes, which is shorter than the county average of 25.3 minutes (U.S. Census Bureau 2014).

**Figure 5.3-1. Modes to Work in Healdsburg in 2010**



Source: U.S. Census Bureau 2014: American Community Survey 2006–2010

### 5.3.2 Healdsburg’s Existing Actions to Reduce GHG Emissions

Healdsburg has already taken a number of steps to reduce energy use, promote renewable energy use, and other actions that have been helping to reduce GHG emissions. Existing actions already taken by Healdsburg include ordinances and General Plan policies that will support the implementation of the formal GHG reduction measures in this CAP.

- Building Energy
  - Residential Retrofits: The City’s Utility Department offers a free home energy audit to identify retrofit potential.
  - Residential Retrofits – Residential Weatherization & Sealing: Program offering rebates for home insulation, replacement windows and treatments, HVAC repair, duct insulation and sealing, blower-door tests, roof radian barrier, and cool roof.
  - Residential Retrofits - Lighting: Program offering rebates for light-emitting diode (LED) bulbs and holiday light strings.

- Residential Appliance Upgrades: Program offering rebates for Energy Star® refrigerators as well as dishwashers and clothes washers (when the household has an electric hot water heater).
- Residential Appliance Upgrades: Program offering rebates for energy efficient heat pumps, HVAC units, and electric hot water heaters.
- Residential Pool Pumps: Program offering a rebate for upgrading current pool pumps to an energy efficient variable-speed pump.
- Solar Installations at Residences: Per CA SB-1, Healdsburg residents may be eligible to offset part or all of their electric usage with a solar photovoltaic (PV) system. Tax credits may also be available to help with the installation of a PV system.
- Commercial Energy Efficiency Program: The City offers a customizable commercial rebate program that pays customers based on the first year's energy savings and peak demand reduction.
- City Electric Department's commitment to renewable energy: Clean resource mix exceeds state-mandated requirements. Much of energy used from geothermal and hydro.
- Green Building Program: Municipal Code Chapter 15.16 requires California Green Building Code compliance above and beyond the State Building Standards when any of the following are triggered:
  - Reconstruction of residential buildings of any size - Mandatory Measures.
  - New residential construction over 3,000 sqft - Tier 1 Residential.
  - Reconstruction of nonresidential buildings containing 5,000 sqft or more - Mandatory Measures.
  - New nonresidential construction over 10,000 sqft - Tier 1 Nonresidential.
- Compliance with accepted GHG reduction goals: General Plan Policy NR-E-3. The City will comply with California's Publicly Owned Utilities' Principles Addressing Greenhouse Gas Reduction Goals.
- Sustainable building practices: General Plan Policy NR-E-4. The City will support sustainable development and building practices and lead by example in municipal projects.
- Land Use and Transportation
  - Bicycle and Pedestrian Master Plan: Detailed citywide non-motorized transportation plan.
  - Foss Creek Pathway Plan: 4.1 mile bike path running north-south through Healdsburg. Connects to Old Redwood Highway and Windsor.
  - Transit Oriented Development: General Plan Policy NR-F-2. The City will promote land use patterns that support the use of transit systems and pedestrian and bicycle facilities.

- Land use surrounding transit: General Plan Policy LU-F-1. Land uses adjacent to transit facilities should derive maximum benefit from transit facilities and may include retail, office, employment and higher-density residential uses.
- Mixed-use development: General Plan Policy LU-F-2. The City shall encourage mixed use development around the historic railroad depot to support transit use.
- Bicycle-Transit Accommodations: Healdsburg Bicycle and Pedestrian Master Plan Policy 3.3. Encourage regional transit providers to accommodate bicyclists on transit vehicles and plan for the need for additional bicycle storage capacity.
- Safe-Routes-To-Transit Program: Healdsburg Bicycle and Pedestrian Master Plan Policy 3.1. Develop and implement a safe-routes-to-transit program that places a high priority on pedestrian and bike access to transit stops and centers.
- Bicycle Detection: Healdsburg Bicycle and Pedestrian Master Plan Policy 2.2. Where feasible, ensure that new and rehabilitated signalized intersections include bicycle detection and are properly marked and operational for use by bicyclists.
- Maintain transit service: General Plan Policy T-E-3. The City shall encourage Sonoma County Transit (SCT) to maintain, at a minimum, present level of service.
- Coordinate transit infrastructure: General Plan Policy T-E-6. The City shall work with SCT to coordinate stop locations and bus schedules for easy transfers.
- Multi-modal integration: General Plan Policy T-D-5. The City shall promote and facilitate the use of bikes with other transportation modes.
- Support alternative transportation: General Plan Policy T-D-1 and T-D-3. Encourage alternative transportation modes by establishing a bike and pedestrian network interconnecting residential areas with recreation, shopping, employment, commuting and local transportation.
- Traffic calming: General Plan Policy T-B-4. Traffic calming measures will be considered to maintain reasonable speeds on City streets and improve pedestrian and bicycle safety.
- Support communitywide transit operation: General Plan Policy NR-F-1. The City will encourage the use of transit systems and other alternatives to automobile use.
- Running of engines while stopped: Municipal Code Chapter 10.28.160. Emitting vehicles shall be turned off while stopped. Ord. 1005 § 2, 2003. Code 1964 § 12.32.130.
- Trip Reduction Ordinance: All employers within the City of Healdsburg with 100 or more employees at an individual job site shall disseminate trip reduction information regarding transportation alternatives including carpools, vanpools, transit and bicycling, and other methods of reducing trips such as telecommuting, compressed work week, and flexible work hours annually to each employee and to all new employees as they are hired.
- Water and Wastewater Efficiency Resolution No. 58-2013: Stage 1 Voluntary Water Conservation Measures. Seeks a 20% reduction in water consumption from 2012.

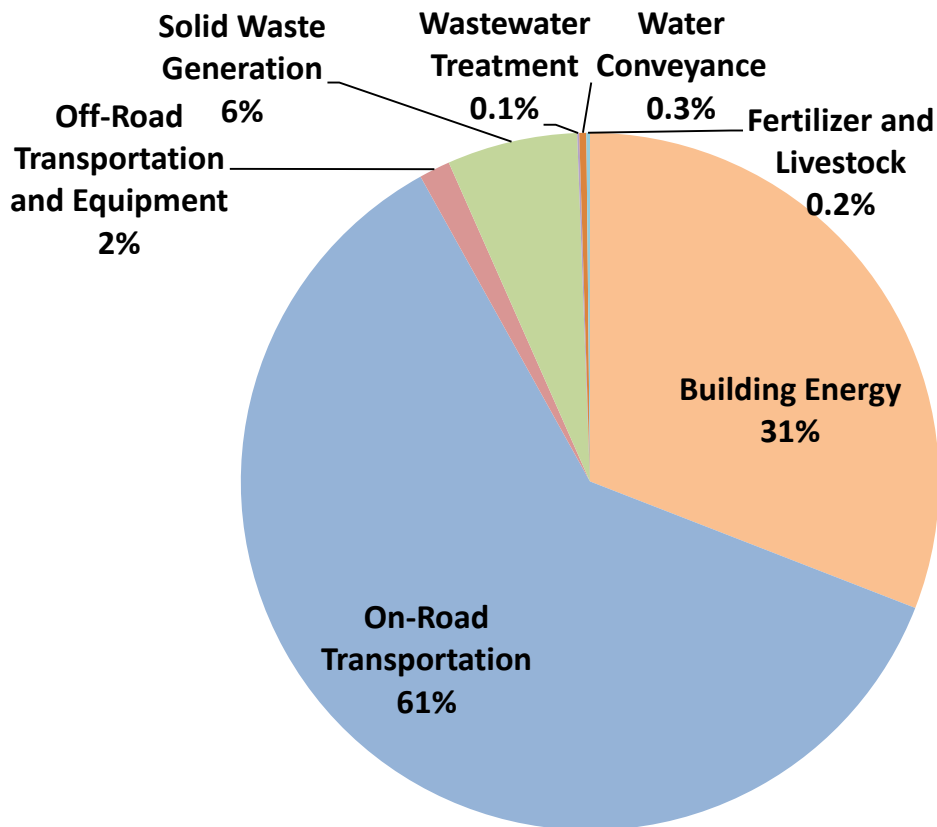
- Ordinance No. 1077: Water Shortage Emergency Plan. City adopts Water Conservation Measures to be implemented in times of critical shortage.
- Water Shortage Emergency Declaration Resolution No. 8-2014: Stage 2 Mandatory Water Conservation Measures – Requires implementation of Water Conservation Measures identified in the Water Shortage Emergency Plan.
- Water Efficient Landscape Ordinance No. 1091. The ordinance promotes the efficient design and installation of water-efficient landscapes in Healdsburg associated with new construction and substantial alterations of existing development where landscapes are proposed.
- Agriculture
  - Agricultural uses outside UGB: General Plan Policy NR-D-2. The City will encourage the County to retain agricultural uses on lands surrounding the Urban Service Area.
  - Sustainable agriculture: General Plan Policy NR-D-4. The City will promote the sustainability of local agriculture.
- Urban Forestry and Natural Areas
  - Protect natural features: General Plan Policy NR-C-1. New development shall not be allowed to breach the Urban Growth Boundary except under the exceptional circumstances allowed by this General Plan.
  - Open space acquisition: General Plan Policy NR-B-5. The City will work with Sonoma County Agricultural Preservation and Open Space District, the Sonoma Land Trust and other non-profit conservation organizations and agencies in acquiring and maintaining key open space and habitat areas where such an arrangement would benefit both the City and the property owner.
  - Maximize tree protection: General Plan Policy NR-B-3. New development shall be sited to maximize the protection of native tree species, riparian vegetation, important concentrations of native plants, and important wildlife habitat.
  - Encourage tree planting: General Plan Policy NR-E-5. The City will encourage the use of large-scale trees in new development to lessen heat build-up from solar radiation.
  - Open Space Preservation Growth Control Measures: Municipal Code Chapter 17.24 – limit the construction of new residential units within the incorporated boundaries of the City to an average of 30 units per year.
  - Open Space Preservation: Riparian Setbacks: Municipal Code Title 20 – Article III Chapter 20.24.085. Riparian setbacks have been established to protect rivers, creeks and streams from encroachment by urban uses and to protect riparian habitats.
  - Heritage Tree Protection: Municipal Code Title 20 – Article II Chapter 20.24.035. Protect certain trees in order to improve air quality, assist in abating soil and slope erosion and

preserve and enhance property values, thus promoting the public health, safety and welfare.

- General
  - Reduce GHG emissions: General Plan Policy NR-E-1. The City will reduce GHG emissions produced communitywide.
  - Municipal GHG emissions: General Plan Policy NR-E-2. The City will reduce GHG emissions produced by internal municipal operations.
  - Enforce state climate protection goals: General Plan Policy NR-E-6. The City will comply with state climate protection goals and programs to the maximum extent allowed by the City's jurisdictional authority.

### 5.3.3 Greenhouse Gas Inventory and Forecast

**Figure 5.3-2. Healdsburg 2010 Community GHG Inventory by Sector**



Healdsburg's inventory is similar to other cities in the county and the region. The majority of GHG emissions are from the transportation sector due mostly to fossil fuel combustion in personal and light-duty vehicles. The next largest sector is building energy, which includes emissions related to energy used to heat homes and businesses in Healdsburg. Residential uses account for most



(52%) of the building energy emissions in Healdsburg. Commercial uses account for 44% of building energy emissions. Emissions resulting from energy consumed for industrial purposes are a small fraction (4%) of total energy use emissions in the community. The other categories of emissions are much smaller in comparison to building energy and on-road transportation.

Total GHG emissions generated by community activities in 2010 were 108,760 MTCO<sub>2</sub>e, which is approximately 4% of countywide GHG emissions in the same year. This is a 16% increase from estimated 1990 emissions, which were 93,500 MTCO<sub>2</sub>e. Table 5.3-3 shows the 1990 backcast, the 2010 inventory and business-as-usual (BAU) forecasts for 2015, 2020, 2040 and 2050 for the City of Healdsburg.

**Table 5.3-3. Healdsburg Community GHG Backcast, Inventory, and Forecasts**

<b>Sector</b>	<b>1990 Backcast</b>		<b>2010 Inventory</b>		<b>2015 Forecast</b>		<b>2020 Forecast</b>		<b>2040 Forecast</b>		<b>2050 Forecast</b>	
Building Energy	21,310	23%	33,670	31%	33,890	29%	34,150	28%	34,690	28%	34,950	29%
On-Road Transportation	60,180	64%	66,470	61%	74,180	63%	77,630	64%	78,080	63%	75,090	62%
Off-Road Transportation and Equipment	1,570	2%	1,570	1%	1,810	2%	2,100	2%	3,640	3%	3,680	3%
Solid Waste Generation	10,260	11%	6,580	6%	6,620	6%	6,670	6%	6,750	5%	6,790	6%
Wastewater Treatment	90	0%	110	0.1%	110	0%	110	0%	110	0%	110	0%
Water Conveyance	90	0%	350	0.3%	370	0%	400	0%	460	0%	510	0%
<b>Total</b>	<b>93,500</b>	<b>100%</b>	<b>108,760</b>	<b>100%</b>	<b>116,970</b>	<b>100%</b>	<b>121,040</b>	<b>100%</b>	<b>123,730</b>	<b>100%</b>	<b>121,130</b>	<b>100%</b>
<b>Per-Capita Emissions</b>	<b>9.9</b>		<b>9.7</b>		<b>10.4</b>		<b>10.6</b>		<b>10.5</b>		<b>10.1</b>	

### 5.3.4 Greenhouse Gas Reduction Goal and Measures

The City of Healdsburg joins the other Sonoma County communities to support the regional GHG emissions reduction target of 25% below 1990 countywide emissions by 2020 through adoption of 27 local GHG reduction measures. The City's GHG emissions under 2020 BAU conditions (in absence of state, regional, and local reduction measures) would be approximately 121,040 MTCO<sub>2</sub>e. The City's local GHG reduction measures, in combination with state and regional measures, would reduce the City's GHG emissions in 2020 to 87,180 MTCO<sub>2</sub>e, which would be a reduction of approximately 28% compared to 2020 BAU conditions. The City will achieve these reductions through a combination of state (66%), regional (24%), and local (10%) measures that are technologically feasible and cost-effective per AB 32. Per-capita reductions in Healdsburg in 2020 would be 3.0 MTCO<sub>2</sub>e per person. With the reduction measures in CA2020, per-capita emissions in Healdsburg will be 7.6 MTCO<sub>2</sub>e per person, a 23% reduction in per capita emissions compared to 1990.

**Table 5.3-4. Healdsburg 2020 GHG BAU Emissions, Reductions, and CAP Emissions**

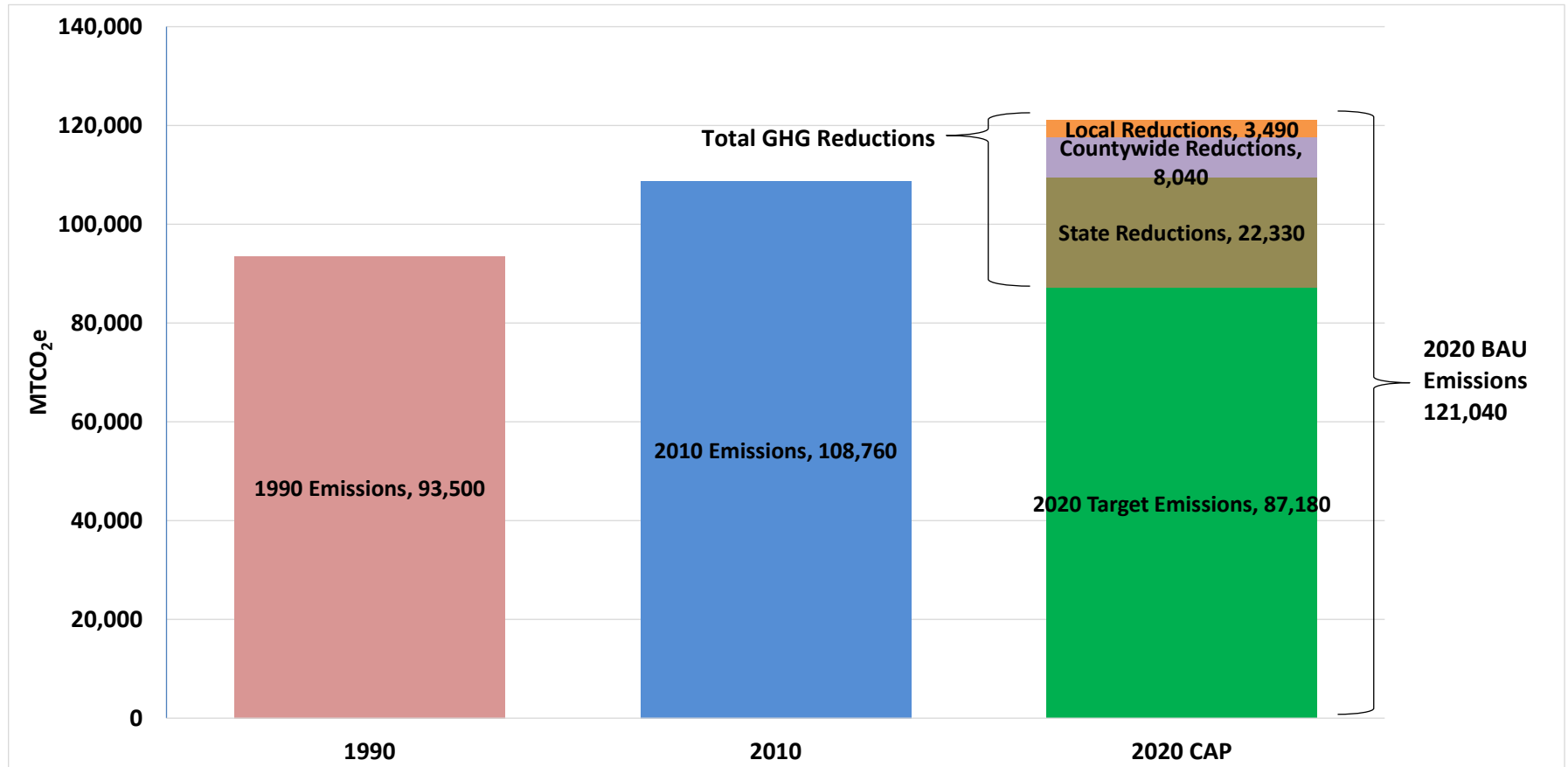
Sector	2020 BAU	Reductions				2020 CAP Emissions	% Reduction from BAU
	Projection	State	County-wide	Local	Total		
Building Energy	34,150	3,980	850	1,390	6,220	27,930	18%
On-Road Transportation	77,630	18,160	2,080	1,830	22,070	55,560	28%
Off-Road Transportation and Equipment	2,100	190	-	50	240	1,860	11%
Solid Waste Generation	6,670	-	4,980	-	4,980	1,690	75%
Water Conveyance	400	-	120	200	320	80	80%
Wastewater Treatment	110	-	-	20	20	90	18%
<b>Total Emissions</b>	<b>121,040</b>	<b>22,330</b>	<b>8,040</b>	<b>3,490</b>	<b>33,860</b>	<b>87,180</b>	<b>28%</b>
		<b>66%</b>	<b>24%</b>	<b>10%</b>			

Values may not sum due to rounding.

<sup>1</sup> The GHG Performance Standard for New Development is not a sector of the inventory, but it contributes toward the City's reduction goal by promoting reductions in multiple sectors. Please see Chapter 3, *Reducing Community Emissions*, for a complete description of this measure.

Figure 5.3-3 shows Healdsburg's 1990 and 2010 GHG emissions total, 2020 BAU emissions forecast total, and the total emissions remaining after implementation of the City's reduction measures. The contribution of state, regional, and local reductions are overlaid on the 2020 BAU emissions forecast total, representing the total emissions reductions achieved in 2020. Like the other communities, Healdsburg benefits greatly from the work the state and regional entities are committed to implementing on climate action. See Chapter 4 for more information on state and regional actions.

**Figure 5.3-3. Healdsburg 1990, 2010, and 2020 GHG Emissions; 2020 State and Local Reductions**





## Greenhouse Gas Reduction Measures

As shown in Table 5.1-5, the City of Healdsburg will achieve its reduction goal through a combination of state, regional, and local measures. State reduction measures are implemented through state law, including some that require action by the City to comply with state mandates (e.g., Title 24 energy efficiency measures).

State measure reductions total 22,330 MTCO<sub>2</sub>e, which include the Pavley vehicle fuel efficiency standards, Title 24 building standards, the state's low carbon fuel standard, and the RPS.

Regional measures will reduce emissions by 8,040 MTCO<sub>2</sub>e and will be implemented by regional entities, including the Regional Climate Protection Authority (RCPA), Sonoma County Water Agency (SCWA), County of Sonoma Energy Independence Office (ESD), Sonoma County Transportation Authority (SCTA), and Sonoma Clean Power (SCP).

An additional reduction of 3,490 MTCO<sub>2</sub>e will be achieved through locally adopted measures. The locally adopted measures, although not as high-achieving of GHG reductions as the state and regional measures, are important because they represent the actions that Healdsburg can take directly. The City of Healdsburg has local control over their infrastructure and policies and have selected the local measures that best suit the needs of their community.

The three measures that will have the greatest impact in Healdsburg are, in order of importance, Measure 11-L1 (Senate Bill SB X7-7 - Water Conservation Act of 2009), Measure 5-L6 (Parking Policies), and Measure 8-L1 (Idling Ordinance). These three measures, in addition to reducing GHG emissions, will conserve water and other natural resources and improve air quality and public health in the City. As the county and state continue to experience a historic drought, water conservation will remain an especially important co-benefit.

Sectors with the greatest percentage reduction are water conveyance and solid waste generation. While these sectors achieve a large percentage reduction compared to their BAU emission levels, their CO<sub>2</sub>e reduction in metric tons is relatively small compared to other sectors, especially building energy and on-road transportation.

On the state level, the RPS and the Pavley measures have the greatest potential to reduce emissions in the City. Of the regional measures, the measures with the greatest impact are the waste-to-energy and waste diversion measures.

Table 5.3-5 presents the individual GHG reduction measures that Healdsburg has selected for the CAP. For more information on the specifics of each measure, see Appendix C.

### Green Water Production in the City of Healdsburg

While SCWA has adopted a carbon-free water goal, the City of Healdsburg, which is not served by SCWA, has taken its own steps to deliver water supplied by green energy. By 2020, the City expects that 100% of water deliveries will be from green, non-emitting energy. The reductions from this action by the City are captured in Measure 11-R2.

**Table 5.3-5. Healdsburg 2020 GHG Emissions Reductions by Measure**

✓ = Local Measure (otherwise State or Regional)	2020 GHG Reductions
<b>Goal 1: Increase Building Energy Efficiency</b>	<b>2,015</b>
Measure 1-S1: Title 24 Standards for Commercial and Residential Buildings	93
Measure 1-S2: Lighting Efficiency and Toxics Reduction Act (AB 1109)	959
Measure 1-S3: Industrial Boiler Efficiency	NA
Measure 1-R1: Community Energy Efficiency Retrofits for Existing Buildings	28
Measure 1-R2: Expand the Community Energy Efficiency Retrofits Program	770
Measure 1-L2: Outdoor Lighting ✓	163
Measure 1-L3: Shade Tree Planting ✓	1
<b>Goal 2: Increase Renewable Energy Use</b>	<b>3,116</b>
Measure 2-S1: Renewables Portfolio Standard	2,894
Measure 2-S2: Solar Water Heaters	30
Measure 2-L1: Solar in New Residential Development ✓	2
Measure 2-L2: Solar in Existing Residential Building ✓	57
Measure 2-L3: Solar in New Non-Residential Developments ✓	1
Measure 2-L4: Solar in Existing Non-Residential Buildings ✓	133
<b>Goal 3: Switch Equipment from Fossil Fuel to Electricity</b>	<b>20</b>
Measure 3-L1: Convert to Electric Water Heating ✓	20
<b>Goal 4: Reduce Travel Demand Through Focused Growth</b>	<b>89</b>
Measure 4-L1: Mixed-Use Development in City Centers and Along Transit Corridors ✓	71
Measure 4-L2: Increase Transit Accessibility ✓	17
Measure 4-L3: Supporting Land Use Measures ✓	NQ
Measure 4-L4: Affordable Housing Linked to Transit ✓	1
<b>Goal 5: Encourage a Shift Toward Low-Carbon Transportation Options</b>	<b>2,684</b>
Measure 5-R1: Improve and Increase Transit Service	0
Measure 5-R2: Supporting Transit Measures	NQ
Measure 5-R3: Sonoma-Marín Area Rail Transit	NQ
Measure 5-R4: Trip Reduction Ordinance	302
Measure 5-R5: Supporting Measures for the Transportation Demand Management Program	NQ
Measure 5-R6: Reduced Transit Passes	280
Measure 5-R7: Alternative Travel Marketing & Optimize Online Service	224

✓ = Local Measure (otherwise State or Regional)	2020 GHG Reductions
Measure 5-R8: Safe Routes to School	761
Measure 5-R9: Car-sharing Program	NQ
Measure 5-R10: Bike Sharing Program	NQ
Measure 5-L1: Local Transportation Demand Management Program ✓	112
Measure 5-L2: Carpool-Incentives & Ride-Sharing Program ✓	146
Measure 5-L3: Guaranteed Ride Home ✓	NQ
Measure 5-L4: Supporting Bicycle/Pedestrian Measures ✓	NQ
Measure 5-L5: Traffic Calming ✓	30
Measure 5-L6: Parking Policies ✓	830
Measure 5-L7: Supporting Parking Policy Measures ✓	NQ
<b>Goal 6: Increase Vehicle and Equipment Fuel Efficiency</b>	<b>18,164</b>
Measure 6-S1: Pavley Emissions Standards for Passenger Vehicles and the Low Carbon Fuel Standard	16,928
Measure 6-S2: Advanced Clean Cars	539
Measure 6-S3: Assembly Bill 32 Vehicle Efficiency Measures	697
<b>Goal 7: Encourage a Shift Toward Low-Carbon Fuels in Vehicles and Equipment</b>	<b>761</b>
Measure 7-S1: Low Carbon Fuel Standard: Off-Road	186
Measure 7-R1: Shift Sonoma County (Electric Vehicles)	515
Measure 7-R2: Alternative Fuel for Transit Vehicles	2
Measure 7-L1: Electric Vehicle Charging Station Program ✓	11
Measure 7-L2: Electrify Construction Equipment ✓	47
Measure 7-L3: Reduce Fossil Fuel Use in Equipment through Efficiency or Fuel Switching ✓	NQ
<b>Goal 8: Reduce Idling</b>	<b>618</b>
Measure 8-L1: Idling Ordinance ✓	618
<b>Goal 9: Increase Solid Waste Diversion</b>	<b>1,973</b>
Measure 9-R1: Waste Diversion Goal	1,973
Measure 9-L1: Create Construction and Demolition Reuse and Recycling Ordinance ✓	<1
<b>Goal 10: Increase Capture and Use of Methane from Landfills</b>	<b>3,025</b>
Measure 10-R1: Increase Landfill Methane Capture and Use for Energy	3,025
<b>Goal 11: Reduce Water Consumption</b>	<b>1,047</b>
Measure 11-R1: Countywide Water Conservation Support and Incentives	NQ

✓ = Local Measure (otherwise State or Regional)	2020 GHG Reductions
Measure 11-L1: Senate Bill SB X7-7 - Water Conservation Act of 2009* ✓	1,047
<b>Goal 12: Increase Recycled Water and Greywater Use</b>	<b>47</b>
Measure 12-R1: Recycled Water*	47
Measure 12-L1: Greywater Use* ✓	0
<b>Goal 13: Increase Water and Wastewater Infrastructure Efficiency</b>	<b>114</b>
Measure 13-R1: Infrastructure and Water Supply Improvement	77
Measure 13-R2: Wastewater Treatment Equipment Efficiency*	37
<b>Goal 14: Increase Use of Renewable Energy in Water and Wastewater Systems</b>	<b>185</b>
Measure 14-L1: Green Energy for Water Production and Wastewater Processing in Healdsburg and Cloverdale* ✓	185
<b>Total State Measures</b>	<b>22,330</b>
<b>Total County Measures</b>	<b>8,040</b>
<b>Total Local Measures</b>	<b>3,490</b>
<b>Grand Total Emissions</b>	<b>33,860</b>

\*Measures reduce emissions in multiple sectors (i.e. water and energy)

NQ = not quantified

### 5.3.5 Municipal Greenhouse Gas Reduction Measures

Like the other cities and the county, Healdsburg has recognized the need to reduce GHG emissions from municipal operations. The City has existing programs in place for green municipal buildings and alternative fuels for its municipal fleet. Although municipal GHG reduction measures are not part of this countywide plan, the efforts of local communities are important and will continue in the future. Descriptions of potential municipal GHG reduction measures are provided in Appendix E as an informational resource.